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Amendments to the Claims

1. (Currently amended) A turbine engine comprising:
a central shaft; ~~and~~
a rotor stack carried by the central shaft; ~~and~~
one or more retainer segments each having a first surface engaging the rotor stack and a second surface engaging the central shaft to transmit a precompression force from the central shaft to the rotor stack; ~~and~~
a full annulus collar securing the one or more retainer segments in place against radial displacement.
2. (Original) The turbine engine of claim 1 wherein there are at least two such retainer segments.
3. (Canceled)
4. (Currently amended) The turbine engine of claim ~~3~~ 1 wherein:
the collar is longitudinally restrained by a bearing support element.
5. (Original) The turbine engine of claim 1 wherein:
said retainer segments are proximate a forward end of the rotor stack; and
there are exactly two said retainer segments proximate said forward end.
6. (Currently amended) ~~The turbine engine of claim 1~~ A turbine engine comprising:
a central shaft;
a rotor stack carried by the central shaft; and
one or more retainer segments each having a first surface engaging the rotor stack and a second surface engaging the central shaft to transmit a precompression force from the central shaft to the rotor stack.
wherein:

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the shaft has a rebate having a forward surface engaging said second surfaces.

7. (Original) The turbine engine of claim 6 wherein:
the rebate is a full annulus.
8. (Original) The turbine engine of claim 6 wherein:
the rebate has an aft surface and a base surface between the forward surface and the aft surface; and
the base surface is essentially rearwardly divergent at a half angle in excess of 5°.
9. (Original) The turbine engine of claim 6 wherein:
the forward surface is essentially within 5° of radial.
10. (Original) The turbine engine of claim 6 wherein:
said precompression force is at least 50kN.
11. (Original) The turbine engine of claim 6 wherein:
the rotor is a high speed compressor rotor.
12. (Original) The turbine engine of claim 6 wherein:
the rotor lacks off-center tie rods.
- 13-18. (Canceled)
19. (Currently amended) ~~The turbine engine of claim 1~~ A turbine engine comprising:
a central shaft;
a rotor stack carried by the central shaft; and
one or more retainer segments each having a first surface engaging the rotor stack and a
second surface engaging the central shaft to transmit a precompression force from the central
shaft to the rotor stack.

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wherein:

the rotor stack comprises a plurality of disks having respective central apertures; and
the central shaft passes freely through said central apertures.

20. (Previously presented) The turbine engine of claim 19 wherein:
the central shaft passes through said apertures with clearance.

21. (Currently amended) ~~The turbine engine of claim 1~~ A turbine engine comprising:
a central shaft;
a rotor stack carried by the central shaft; and
one or more retainer segments each having a first surface engaging the rotor stack and a
second surface engaging the central shaft to transmit a precompression force from the central
shaft to the rotor stack,

wherein:

the rotor stack comprises a plurality of disks having respective bores encircling respective
central apertures; and

the rotor stack is clear of the central shaft of said bores.

22. (New) The turbine engine of claim 21 wherein:
there are at least two such retainer segments; and
a full annulus collar secures the retainer segments in place against radial displacement.

23. (New) The turbine engine of claim 21 wherein:
said precompression force is at least 50kN.

24. (New) The turbine engine of claim 19 wherein:
there are at least two such retainer segments; and
a full annulus collar secures the retainer segments in place against radial displacement.

25. (New) The turbine engine of claim 24 wherein:

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said precompression force is at least 50kN.

26. (New) The turbine engine of claim 19 wherein:
said precompression force is at least 50kN.
27. (New) The turbine engine of claim 1 wherein:
said precompression force is at least 50kN.